

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P276337

Luminaire Tested: **24CZ2-55HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276337
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5213.0 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

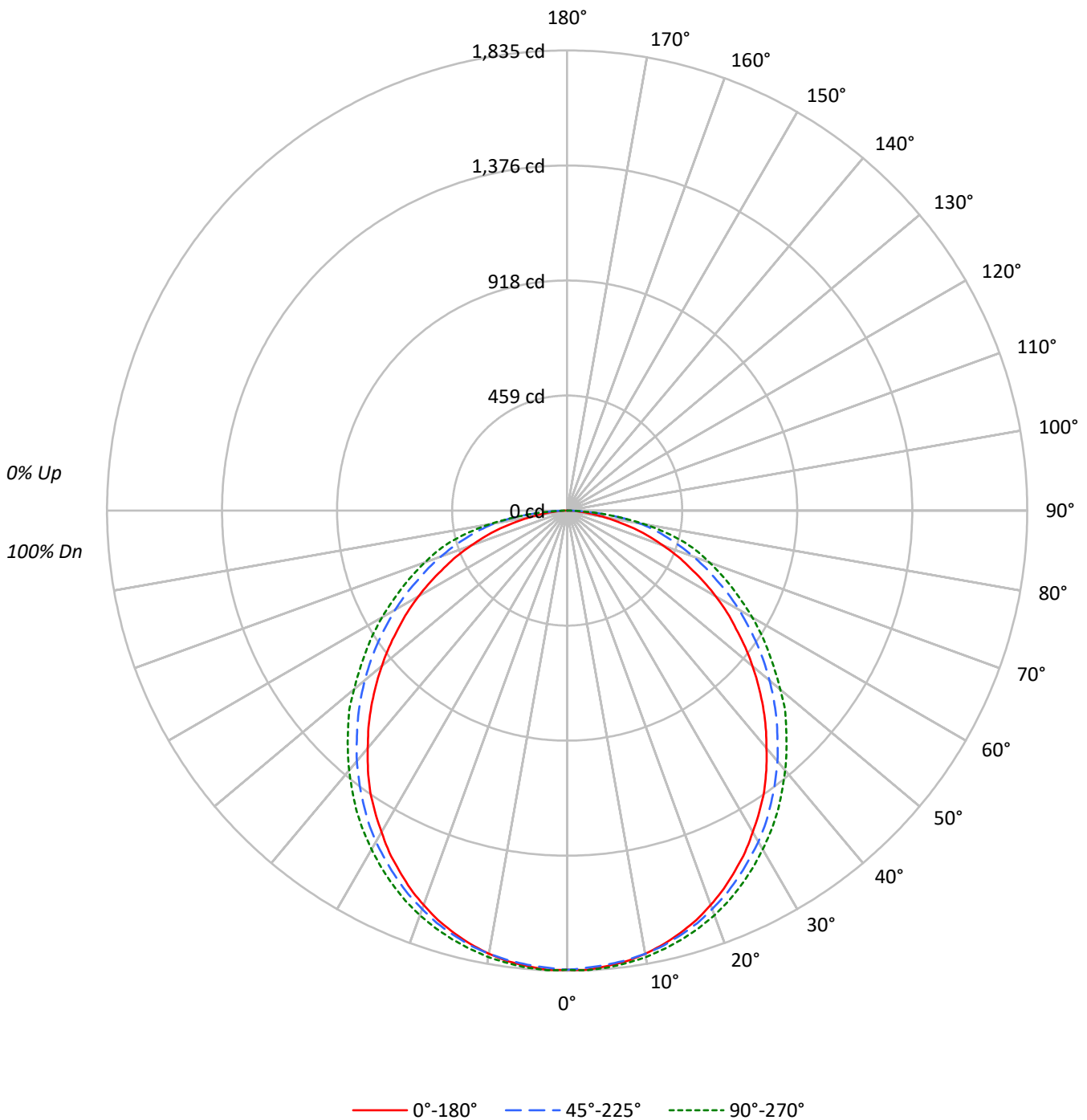
Input Watts (W): 40.002834
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2464	2464	2464
5°	2462	2456	2471
10°	2452	2452	2470
15°	2429	2440	2466
20°	2397	2421	2459
25°	2352	2397	2443
30°	2300	2369	2423
35°	2249	2331	2404
40°	2173	2292	2376
45°	2101	2246	2351
50°	2021	2204	2322
55°	1931	2164	2300
60°	1840	2130	2295
65°	1724	2093	2309
70°	1596	2104	2371
75°	1429	2143	2505
80°	1155	2271	2451
85°	869	1995	1942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.4	3.3
10°-20°	495.4	9.5
20°-30°	744.7	14.3
30°-40°	887.1	17.0
40°-50°	907.9	17.4
50°-60°	817.3	15.7
60°-70°	641.9	12.3
70°-80°	416.6	8.0
80°-90°	128.8	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1413.5	27.1
0°-40°	2300.5	44.1
0°-60°	4025.7	77.2
0°-90°	5213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5213.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1831	1831	1831	1831	1831	
5°	1823	1826	1818	1828	1830	173
15°	1744	1749	1752	1767	1770	492
25°	1585	1598	1614	1641	1646	730
35°	1369	1386	1419	1454	1464	854
45°	1104	1131	1181	1225	1235	851
55°	823	859	922	970	980	738
65°	542	583	657	712	725	539
75°	275	328	412	469	482	291
85°	56	104	129	126	126	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1831.4	1831.4	1831.4	1831.4	1831.4
2.5°	1833.0	1833.0	1824.7	1833.0	1834.7
5°	1823.1	1826.4	1818.1	1828.0	1829.7
7.5°	1813.1	1813.1	1808.2	1818.1	1819.8
10°	1794.9	1796.6	1794.9	1806.5	1808.2
12.5°	1771.8	1775.1	1776.7	1788.3	1790.0
15°	1743.6	1748.6	1751.9	1766.8	1770.1
17.5°	1712.1	1717.1	1725.4	1741.9	1745.3
20°	1674.1	1680.7	1690.6	1712.1	1717.1
22.5°	1632.7	1639.3	1655.8	1675.7	1684.0
25°	1584.6	1597.9	1614.4	1640.9	1645.9
27.5°	1536.6	1548.2	1569.7	1597.9	1604.5
30°	1480.3	1498.5	1525.0	1553.2	1559.8
32.5°	1425.7	1443.9	1475.4	1505.2	1513.4
35°	1369.4	1385.9	1419.1	1453.8	1463.8
37.5°	1304.8	1326.3	1362.8	1397.5	1407.5
40°	1236.9	1263.4	1304.8	1341.2	1352.8
42.5°	1172.3	1200.5	1241.9	1281.6	1294.9
45°	1104.4	1130.9	1180.6	1225.3	1235.3
47.5°	1034.9	1064.7	1117.7	1162.4	1179.0
50°	965.4	996.8	1053.1	1099.5	1109.4
52.5°	895.8	928.9	988.5	1038.2	1043.2
55°	823.0	859.4	922.3	970.3	980.3
57.5°	756.7	788.2	856.1	905.7	917.3
60°	683.9	718.6	791.5	837.9	852.8
62.5°	614.3	650.7	726.9	773.3	786.5
65°	541.5	582.9	657.4	712.0	725.3
67.5°	478.5	518.3	597.8	650.7	664.0
70°	405.7	450.4	534.8	589.5	602.7
72.5°	342.8	389.1	473.6	526.6	546.4
75°	274.9	327.9	412.3	468.6	481.8
77.5°	208.6	269.9	356.0	399.1	399.1
80°	149.0	213.6	293.1	313.0	316.3
82.5°	97.7	160.6	216.9	215.3	215.3
85°	56.3	104.3	129.2	125.8	125.8
87.5°	21.5	43.1	46.4	46.4	44.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)